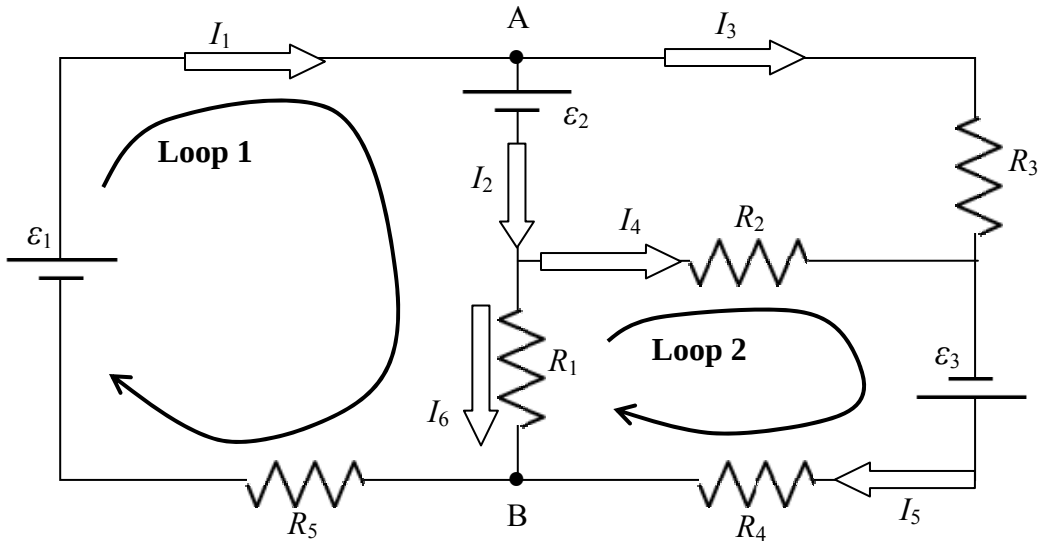
Name: _____ Section: ____

Tuesday, October 13

Quiz 7A

1. Consider the circuit below.



a. Write the equations that correspond to the two loops indicated in the figure.

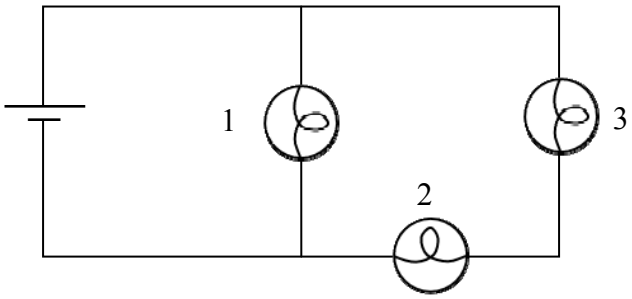
b. Write the junction equations for points A and B.

TURN OVER!!!

2. The bulbs in the circuit below are identical. Rank them from lowest to highest in terms of:

   a. The magnitude of the potential difference across each bulb
   b. The brightness

   You must show your reasoning and/or calculations.

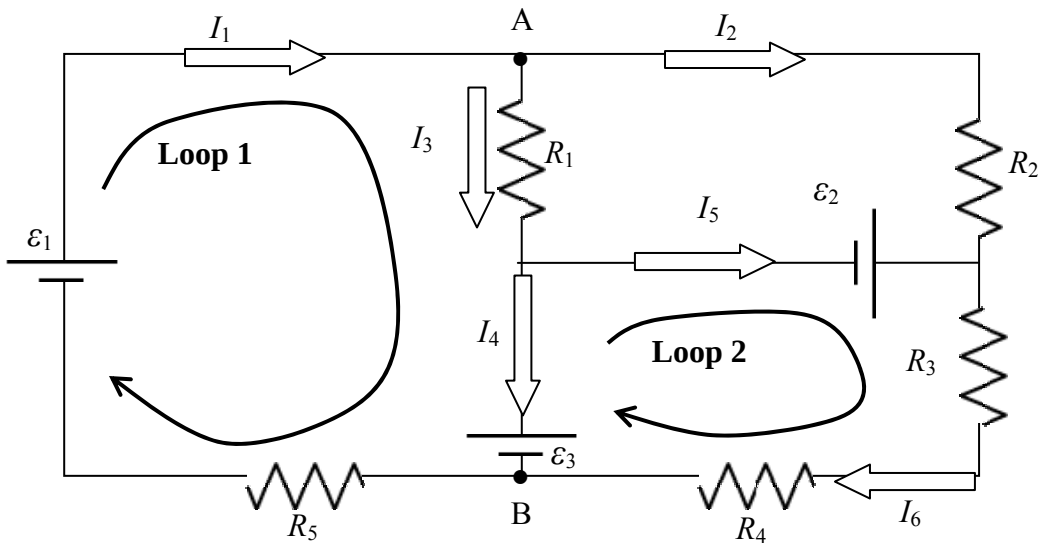


Name: _____ Section: ____

Tuesday, October 13

Quiz 7B

1. Consider the circuit below.



a. Write the equations that correspond to the two loops indicated in the figure.

b. Write the junction equations for points A and B.

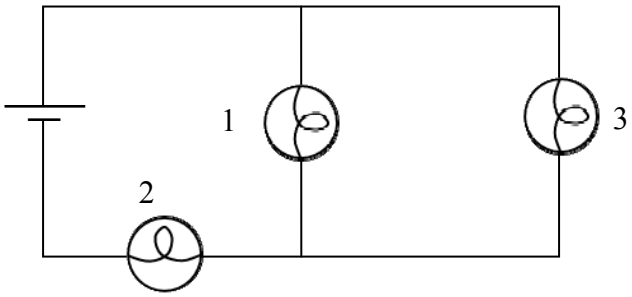
.

TURN OVER!!!

c. The bulbs in the circuit below are identical. Rank them from lowest to highest in terms of:

   a. The magnitude of the potential difference across each bulb
   b. The brightness

   You must show your reasoning and/or calculations.

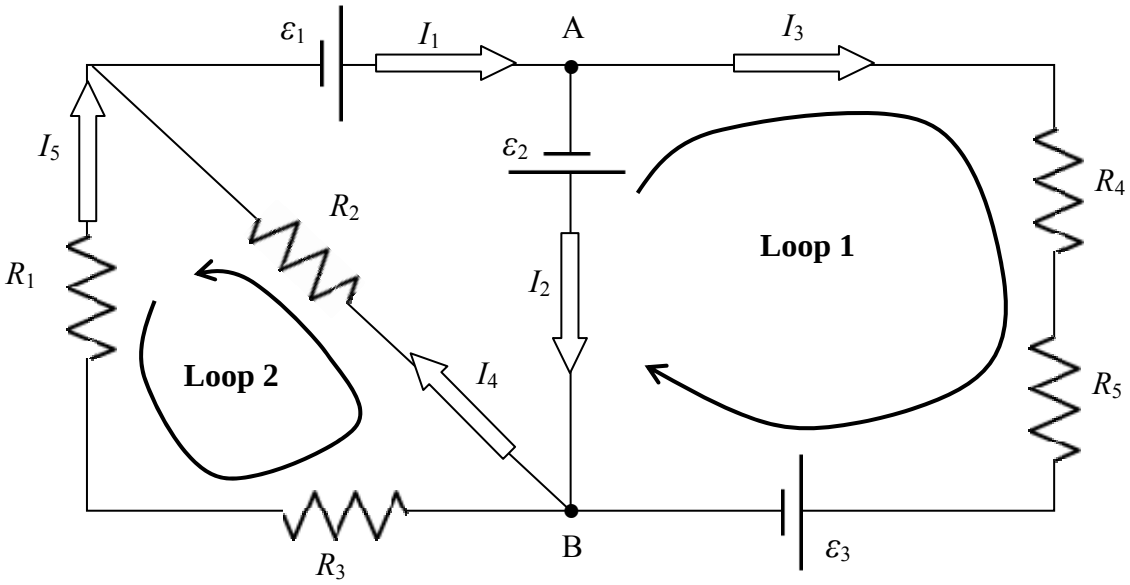


Name: _____ Section: ____

Tuesday, October 13

Quiz 7C

1. Consider the circuit below.



a. Write the equations that correspond to the two loops indicated in the figure.

b. Write the junction equations for points A and B.

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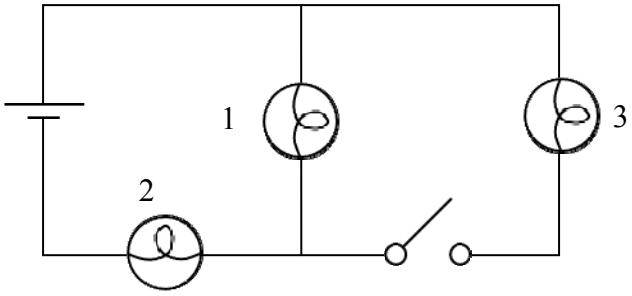
TURN OVER!!!

2. The circuit below has three identical bulbs and the switch is initially open. Explain what happens to the brightness of bulb 2 when the switch is closed. You must show your reasoning and/or calculations.

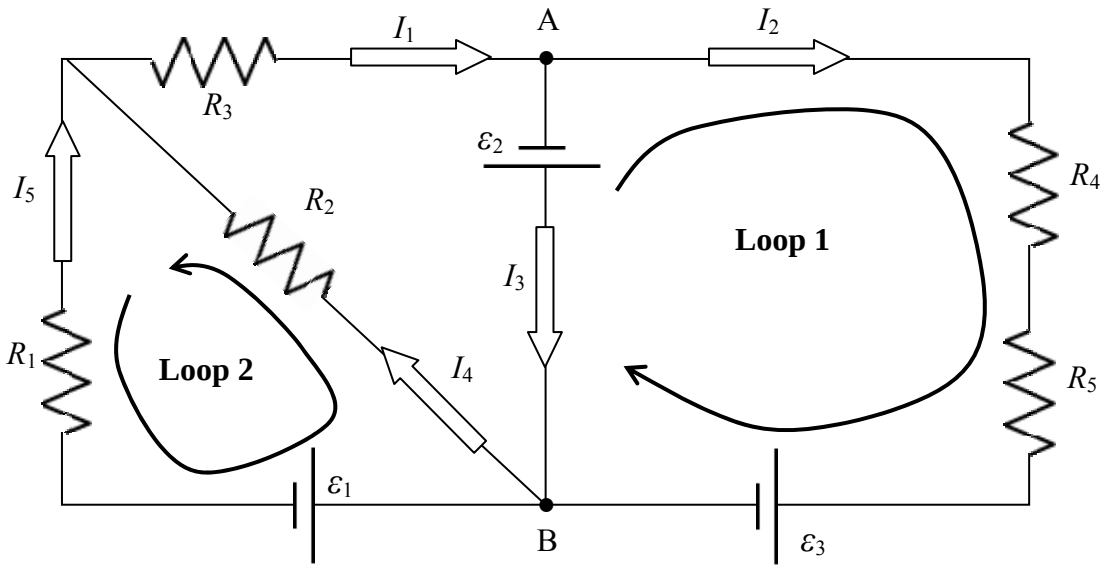


Name: _____ Section: ____

Tuesday, October 13

Quiz 7D

1. Consider the circuit below.



a. Write the equations that correspond to the two loops indicated in the figure.

b. Write the junction equations for points A and B.

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TURN OVER!!!

2. The circuit below has initially two identical bulbs 1 and 2. A third bulb is then inserted between points A and B.
   a. What happens to the brightness of 1 and 2?
   b. Compare the brightness of bulb 1 to that of the third bulb.

   You must show your reasoning and/or calculations.